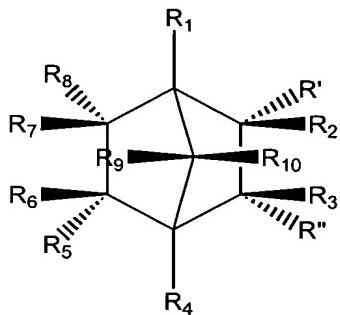


CLAIMS

That which is claimed is:

1. A thermoplastic additive composition comprising at least one anticaking agent component, and at least one compound conforming to the structure of Formula (I)

(I)

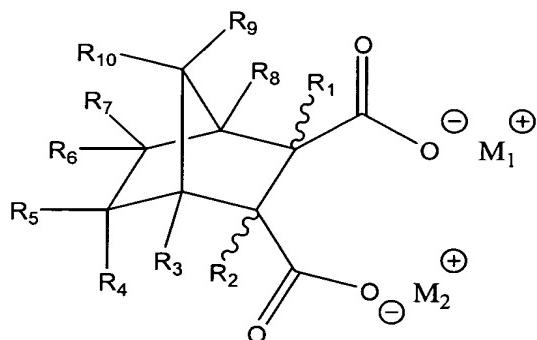


wherein R₁, R₂, R₃, R₄, R₅, R₆, R₇, R₈, R₉, and R₁₀ are individually selected from the group consisting of hydrogen, C₁-C₉ alkyl, hydroxy, C₁-C₉ alkoxy, C₁-C₉ alkyleneoxy, amine, and C₁-C₉ alkylamine, halogen, phenyl, alkylphenyl, and geminal or vicinal carbocyclic having up to nine carbon atoms, R' and R'' are the same or different and are individually selected from the group consisting of hydrogen, C₁-C₃₀ alkyl, hydroxy, amine, polyamine, polyoxyamine, C₁-C₃₀ alkylamine, phenyl, halogen, C₁-C₃₀ alkoxy, C₁-C₃₀ polyoxyalkyl, C(O)-NR₁₁C(O)O-R'', and C(O)O-R'', wherein R₁₁ is selected from the group consisting of C₁-C₃₀ alkyl, hydrogen, C₁-C₃₀ alkoxy, and C₁-C₃₀ polyoxyalkyl, and wherein R'' is selected from the group consisting of hydrogen, a metal ion (such as, without limitation, Na⁺, K⁺, Li⁺, Ag⁺ and any other monovalent ions), an organic cation (such as ammonium as one non-limiting example), polyoxy-C₂-C₁₈-alkylene, C₁-C₃₀ alkyl, C₁-C₃₀ alkylene, C₁-

C_{30} alkyleneoxy, a steroid moiety (for example, cholesterol), phenyl, polyphenyl, C_1-C_{30} alkylhalide, and C_1-C_{30} alkylamine; wherein at least one of R' and R'' is either $C(O)-NR_1C(O)O-R'''$ or $C(O)O-R'''$, wherein if both R' and R'' are $C(O)O-R'''$ then R''' both R' and R'' may be combined into a single bivalent metal ion (such as Ca^{2+} , as one non-limiting example) or a single trivalent metal overbase (such as $Al-OH$, for one non-limiting example).

2. The formulation of Claim 1 wherein said nucleating compound conforms to the structure of Formula (II)

(II)



wherein M_1 and M_2 are the same or different and are independently selected from the group consisting of metal or organic cations or the two metal ions are unified into a single metal ion (bivalent, for instance, such as calcium, for example), and R_1 , R_2 , R_3 , R_4 , R_5 , R_6 , R_7 , R_8 , R_9 , and R_{10} are individually selected from the group consisting of hydrogen, C_1-C_9 alkyl, hydroxy, C_1-C_9 alkoxy, C_1-C_9 alkyleneoxy, amine, and C_1-C_9 alkylamine, halogen, phenyl, alkylphenyl, and geminal or vicinal carbocyclic having up to 9 carbon

atoms. Preferably, the metal cations are selected from the group consisting of calcium, strontium, barium, magnesium, aluminum, silver, sodium, lithium, rubidium, potassium, and the like.

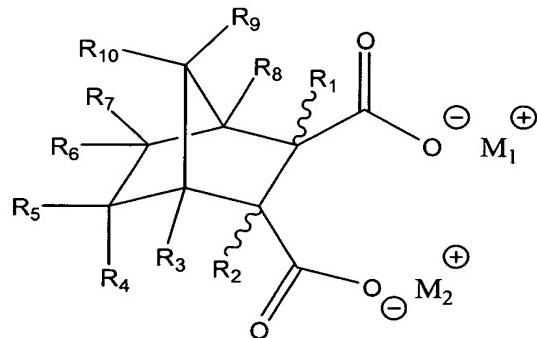
3. The formulation of Claim 1 wherein said metal or organic cation is a metal cation selected from the group consisting of Group I and Group II metal ions.

4. The formulation of Claim 3 wherein said metal cation is selected from the group consisting of sodium, potassium, calcium, lithium, rubidium, barium, magnesium, and strontium, silver, zinc, aluminum.

5. The formulation of Claim 4 wherein said metal cation is sodium.

6. The formulation of Claim 2 wherein said nucleating compound conforms to the structure of Formula (II)

(II)



wherein M₁ and M₂ are the same or different and are independently selected from the group consisting of metal or organic cations or the two metal ions are unified into a single metal ion (bivalent, for instance, such as calcium, for example), and R₁, R₂, R₃, R₄, R₅, R₆, R₇, R₈, R₉, and R₁₀ are individually selected from the group consisting of hydrogen, C₁-C₉ alkyl, hydroxy, C₁-C₉ alkoxy, C₁-C₉ alkyleneoxy, amine, and C₁-C₉ alkylamine, halogen, phenyl, alkylphenyl, and geminal or vicinal carbocyclic having up to 9 carbon atoms.

7. The formulation of Claim 6 wherein said metal or organic cation is a metal cation selected from the group consisting of Group I and Group II metal ions.

8. The formulation of Claim 7 wherein said metal cation is selected from the group consisting of sodium, potassium, calcium, lithium, rubidium, barium, magnesium, strontium, silver, zinc, and aluminum.

9. The formulation of Claim 8 wherein said metal cation is sodium.

10. The formulation of Claim 1 wherein said anticaking agent is selected from the group consisting of silica gel, talc, dihydrotalcite, metal carboxylic acids, and any mixtures thereof.

11. The formulation of Claim 10 wherein said anticaking agent is a silica gel.

12. A thermoplastic article comprising the formulation of Claim 1 and at least one polyolefin.
13. A thermoplastic article comprising the formulation of Claim 2 and at least one polyolefin.
14. A thermoplastic article comprising the formulation of Claim 10 and at least one polyolefin.
15. The thermoplastic article of Claim 12 wherein said polyolefin is a polypropylene.
16. The thermoplastic article of Claim 13 wherein said polyolefin is a polypropylene.
17. The thermoplastic article of Claim 14 wherein said polyolefin is a polypropylene.
18. A polymer additive formulation as defined in Claim 1, wherein said formulation is present in a form selected from the group consisting of a powder, a pellet, or a liquid, and wherein said composition also comprises at least one thermoplastic polymer.
19. A polymer additive formulation as defined in Claim 2, wherein said formulation is present in a form selected from the group consisting of a powder, a pellet, or a liquid, and wherein said composition also comprises at least one thermoplastic polymer.

20. A polymer additive formulation as defined in Claim 10, wherein said formulation is present in a form selected from the group consisting of a powder, a pellet, or a liquid, and wherein said composition also comprises at least one thermoplastic polymer.